

which a pericardial friction sound may simulate an endocardial bruit, yet is not the simulation rather between the former and a double aortic bruit than between the to-and-fro friction sound and a double murmur in the mitral area? As to question 2, the condition of the heart sounds at the end of treatment, on Aug. 17th the serum treatment was begun and on the 23rd the note stands, "Double murmur still heard at the apex"; and on the 26th, "Murmurs softer in character." From this date on the systolic murmur alone was heard at the apex, and the final note on Sept. 21st records, "Soft systolic murmur still faintly heard at apex." To-day, having expressly sent for the patient, I could not hear any murmur at the apex; in the pulmonary area there was a faint systolic bruit. A word as to the cardiac dulness. I have been astonished at the frequency with which in heart cases, especially among women and children, the note is found to be impaired above the third rib along the left border of the sternum. In my experience this is common in the second interspace and not very infrequent under the second rib cartilage; nor is the impairment confined to the immediate neighbourhood of the sternal border, but extends outwards a finger's breadth and more.

By cardiac cases here I mean mitral cases, both of incompetence and obstruction. Dr. Bramwell says: "I presume the cardiac dilatation would be chiefly due to the valvular defect rather than to changes in the cardiac muscle," but I must confess that I had interpreted the case otherwise and had explained the return of the heart to more normal dimensions as due chiefly to a recovery of the heart muscle. The case, it will be noted, was an acute one, the patient coming in on June 22nd and his first symptoms of cardiac discomfort having arisen on June 6th. But to look away from physical signs, how are we to explain a *cardiac* case in which there is an irregular, long-continued pyrexia associated with wasting and cachexia, and the appearance of successive outbreaks of an erythematous eruption, and finally with the discovery of streptococci in the blood? How can we explain such a case otherwise than as a septic cardiac case? Can a pericarditis cover it? I do not see how it can, but if it could it would be none the less septic. From a therapeutic point of view, then, this case of blood-poisoning, whether of endo- or exocardial origin, will belong to the same category, and its treatment will have the same interests; but I conceive that there is no room for doubt as to its endocardial nature.

I am, Sirs, yours faithfully,

Welbeck-street, Nov. 3rd, 1896. HARRINGTON SAINSBURY.

"APPLIED BACTERIOLOGY."

To the Editors of THE LANCET.

SIRS,—Your comment on the little book on "Applied Bacteriology" which Mr. Pearmain and I have just published is so fair that, though I am afraid that in some respects it does the work more than justice, I should like to explain one passage to which your reviewer took exception. The full quotation is: "In waters that have been very copiously contaminated with sewage there is no great difficulty in detecting the typhoid or colon bacillus, if present." No doubt the separation of the typhoid bacillus from the colon may sometimes be troublesome, as, indeed, we state in the account of typhoid on page 147. But I hardly think that the recognition of the one or other organism, as indicating sewage pollution, is likely to present any great difficulties even to students. In most cases, indeed, where we had any doubt as to the practicability of a method we practised it ourselves before describing it in this manual. With both colon and typhoid bacilli we repeatedly used artificially contaminated waters for trying the several methods described, and found no trouble at all with those which we ultimately recommended.

I am, Sirs, yours faithfully,

King's College, London, W.C., Nov. 2nd, 1896.

C. G. MOOR.

CONGENITAL DISLOCATION OF THE HIPS.

To the Editors of THE LANCET.

SIRS,—The report of a recent meeting of the British Orthopaedic Society, which appeared in THE LANCET of Oct. 31st, is not quite correct as regards the description of the cases which I exhibited. These cases were instances of ordinary double congenital dislocation of the hip-joints, and were shown as contrasts to a *quite exceptional case* which I described. The skiagraphs of these ordinary cases exhibit

shallow or rudimentary acetabula and malformed heads of the femora, whereas the skiagraph of the *exceptional case* shows well-formed acetabula and perfectly normal heads of the femora. I may add that the skiagraphs only confirm the opinion I formed of this patient's condition ten years ago, when my advice to try reduction under chloroform was not accepted, although the child was then only two years old. I shall shortly publish a full account of this case, but in the meantime shall be glad to correct the impression which may have been formed by anyone reading the report referred to above.

I am, Sirs, yours faithfully,

Cavendish-square, W., Nov. 3rd, 1896.

NOBLE SMITH.

"POOR ASSISTANT."

To the Editors of THE LANCET.

SIRS,—I have received a letter signed "Poor Assistant," and my correspondent wishes me to reply to him through your columns if you will kindly allow me to do so. "Poor Assistant's" difficulty is one which the Medical Defence Union can readily remove if he will send the full facts to Dr. Bateman, the General Secretary of the Medical Defence Union, addressed to the Offices, 20 and 21, King William-street, Strand, London, W.C.—I am, Sirs, yours faithfully,

Cavendish-square, W., Nov. 3rd, 1896.

VICTOR HORSLEY.

WANTED, AN IDENTIFICATION.

To the Editors of THE LANCET.

SIRS,—May I venture to ask you to add to your many acts of mercy yet another, and allow me to appeal to the readers of your valuable journal to help me to recover a missing daughter? My daughter left her home on the 26th ult. and has not since been heard of although I have used all means in my power to trace her. She has evidently got into bad company as when she left home she was well on in pregnancy, and must be confined, if she has not already become a mother.

The following is a description of her:—Age 22, but looks very much younger; dark; height about 4 ft. 7 in.; very pretty, with small features and good figure; sometimes she has a slight divergence in one of her eyes; one of her little fingers is bent inwards, the tendon being contracted. She had a good stock of clothes when she left home and took a large brown canvas trunk with initials L. E. C., but these may have been changed. Her name is Lillie or Lillian. It is not usual, I know, for you to publish such cases, but may I ask you to make an exception in this case and help save a girl from further ruin and a father from an unhappy life? To appeal to the medical profession seems my last chance, as her condition must come before some medical practitioner, if it has not already done so. Should any of your readers think that my description agrees with any person whom they have attended since the 26th ult., or may yet attend, I shall be extremely thankful if they will communicate with yourselves, begging you to forward the communication to me.

I am, Sirs, yours faithfully,

E. C.

* * We consider that the medical man who has attended this case will be justified in revealing the whereabouts of his patient. He will be violating no confidences of a professional character, for the condition of the girl is known to her parents and so is the fact that she has run away. On the other hand, he may possibly save her from a life of shame and earn her gratitude in time to come. We shall be happy to forward any information that we receive immediately to the parents.—ED. L.

"THE MEDICAL SERVICE AT ST. PAUL'S."

To the Editors of THE LANCET.

SIRS,—As one of those invited by the so-called Guild of St. Luke to the late function in St. Paul's Cathedral, described by an anonymous correspondent in THE LANCET of Oct. 31st, will you allow me to state some of my reasons for declining to take part in that proceeding and for withholding my sympathy from the whole movement, of which it is only a feeble expression? It is notorious that the churches have lately begun to assert themselves with unwonted activity, if not effrontery, and the

"reaction against science" which they affect to have discovered is now triumphantly proclaimed in high places. What they desire to bring back is a Saturnian age of ignorance and obscurantism. For half a century the Church of England has been busily coquetting with the Church of Rome; and here, in London, only the other day, was published the "History of the Holy House of Loreto," in which the same audacious miracles so long associated with the legend are unblushingly re-asserted. The Bishop of Stepney, in his sermon at St. Paul's, as reported in the *Times*, professed it to be his object to reconcile religion and science, and to rescue our profession from being lost in the wandering mazes of materialism. But if the worthy prelate were as familiar with science as he doubtless is with religion he would know that the two are absolutely irreconcilable and that a scientific religion would be a contradiction in terms. This was long ago pointed out by George Lewes in his "History of Philosophy," and is the theme of Mr. A. Balfour's "Foundations of Belief" as well as of Mr. Kidd's "Social Evolution." Religion is, as the latter author expresses it, supra-rational. I see that your correspondent quotes, without any adequate sense of its meaning, the trite mediæval proverb, "Ubi tres medici, ibi sunt duo athei." But he may learn from Mr. Lecky that the word atheism in those days was used in the very loosest sense and was applied indiscriminately to disbelievers in witchcraft, apparitions, and similar superstitions. Indeed, Dugald Stewart shows that at one time disbelievers in apostolical succession were commonly denounced as atheists. In a word, it seems to me advisable to let St. Luke abide in the spiritual realm to which he prescriptively belongs; and if we want a mythical name to inscribe upon our professional banners let it be that of our real father, Asklepios, under whose auspices the greatest physicians have been content to walk and fulfil their beneficent mission to mankind.

I am, Sirs, yours faithfully,

Nov. 1st, 1896.

TIMEO DANAOS.

SANITATION AT EXETER.

(FROM A SPECIAL CORRESPONDENT.)

THE town of Exeter now suffers from the fact that it was one of the first towns in England to undertake great sanitary measures. After the cholera epidemic of 1832 the idea of building sewers was seriously entertained, and a whole system of drainage was completed in 1846. In those days little or no experience had been acquired in the building of sewers. According to the common error of those times, the sewers built at Exeter were far too large for the purpose. Fortunately the natural fall is, on the whole, favourable; but in the High-street the flow is less than two feet per second, and therefore the High-street sewer cannot be self-cleansing. There are also places where the sewers dip and rise again, thus constituting a sort of elongated syphon where deposits are formed and where stagnation must occur when the flow of sewage is not strong. These sewers once built there was, of course, some difficulty in persuading the inhabitants to connect their houses with them. This work evidently proceeded slowly, as a good many houses remained unconnected even in 1866. The cholera scare of that year facilitated the efforts of the authorities, and they then destroyed about 1000 cesspits. In 1878 the council was able to take another great step. They purchased the waterworks and established a constant-supply system. The water comes from the River Exe and the intake is some four miles above the town. Beyond the intake there are two towns, but their sewage has been diverted and does not fall into the river. The water is drawn from the river through a closed culvert, which, it is claimed, acts as a natural filter. It is then pumped up to the waterworks, where it is again filtered. The supply is not apt to run short in dry seasons, as happens too often when water is derived from springs. The medical officer of health reports that the frequent bacteriological and chemical examinations of the water have proved satisfactory. The present supply is equal to 1,750,000 gallons per day, and the population of Exeter is estimated at 38,000. A proposal is now, however, under consideration for the construction of new filter beds by which the supply would

be increased to 2,550,000 gallons daily. A good water-supply having thus been secured the town council proceeded to take measures to prevent this water from being fouled through improper storage within the houses. Seven years ago all householders were called upon to provide separate cisterns for their waterclosets, so that no drinking-water should be taken from these cisterns. Strange to say, this injunction was enforced with great facility. It was not necessary to prosecute anybody. The council held that water coming from closet cisterns could not be considered as a "proper supply" within the meaning of the Public Health Act, and therefore house-owners must provide a separate cistern for their waterclosets. It is a pity that this same rule is not applied in the metropolis, where any number of houses, and especially better-class houses, have but one cistern, which supplies alike the kitchen tap and the flush for the watercloset. The rule enforced in the old houses was naturally applied to the new houses, and no building was sanctioned unless there was a separate cistern for the watercloset. As there have been about 2000 new houses built within the last few years at Exeter, the fact that so many new houses were in good condition in this respect has acted as an example and helped to bring the older houses into line.

The town council adopted the Public Health Act in 1866. Previously the council had been the sanitary authority, but not the road or sewer authority. The latter public services were discharged by a body called the Improvements Commissioners. In 1867 these commissioners were superseded and the town council became the urban sanitary authority. Among other improvements that then ensued it should be noted that thenceforward no private slaughterhouses were licensed. The council determined to gradually abolish private slaughterhouses. It must be confessed that the work was done very gradually. It was only in 1880 that some old gasworks were purchased and converted into a public abattoir. In 1867 there were twenty-six private registered slaughterhouses, and there now still remain eight. Many of the old slaughterhouses were situated in densely crowded areas and there can be no doubt that their abolition has been of great benefit to the health and cleanliness of the town. The retort-house of the old gasworks makes a very lofty, well-aired slaughterhouse for bullocks, and the cattle market is near at hand. The butchers are, on the whole, well satisfied to kill their cattle here, but they would like the building to be divided into compartments so that each butcher might kill privately without being watched by his rivals in the trade. This, however, would defeat the object of the reform. The glare of publicity is the best protection for the public. The caretaker employed by the municipality was formerly a skilled butcher, who in his time has perhaps slaughtered as many cattle as anyone in the town, and is, therefore, considered to possess extensive practical experience. The inspector of nuisances also frequently calls in at the slaughterhouse. At the time of my visit I found the slaughterhouse absolutely free from any sort of bad odour. Large doors and numerous windows and apertures provided ample ventilation and through draughts. The floor was made with cobbles, well cemented. These give a good foothold; but the amount of blood that flows on this floor is very small. It is all carefully collected and is too precious for industrial purposes to be wasted. The entrails are emptied in a large iron vat placed on wheels, so that very little offal or blood reaches the sewer from the slaughterhouse. As a further precaution, however, two small cottages that overlook the slaughterhouse have been purchased by the municipality and will be kept without inhabitants. This measure, intended to better isolate the slaughterhouse, is all the more necessary as it is situated close to the river in a low-lying and poor part of the town.

In this neighbourhood I noticed some very dilapidated and squalid dwellings, but I also noticed that one of the rows of the worst houses stood by itself. A similar row that was built in front and another immediately behind had been pulled down. If the remaining property was poor, it was, in any case, well swept by the wind both in front and behind. The part of the High-street that traverses this district to reach the bridge over the Exe has been artificially raised so as to render the descent to the river less steep and dangerous. One set of lofty houses built against the foundations of the High-street have no back windows for the first three storeys. The upper two or three storeys give on to the High-street. Thus the fourth floor from the low level